Show

56. (Amended) A method of making a glazing, comprising:
laminating the device of Claim 22 with at least one rigid constituent substrate.

- 57. (Amended) A electrochemical energy storage device, comprising: the device of Claim 22.
- 58. (Amended) The electrochemical energy storage device of Claim 57 which is a battery or a fuel cell.

REMARKS

Applicants wish to thank Examiner Hindi for his helpful and courteous telephone conversations with Applicant's Representative on December 2 and 12, 2002. Further, Applicants wish to thank the Examiner for indicating allowability of the Claims over the prior art of record.

The Claims have been amended to correct minor informal errors as requested by the Examiner and to better conform to accepted U.S. patent pratice.

No new matter has been added. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 22-58 remain active in this application.

In addition, Applicants respectfully request that the Examiner acknowledge that the references cited in the Information Disclosure Statement, filed in the above-identified application on May 10, 2002, have been considered. For the Examiner's convenience a copy of Form PTO 1449 as filed on May 10, 2002, is attached herewith.

Applicants respectfully request that the Examiner acknowledge that the references cited in the International Search Report, filed in the above-identified application on November 17, 2000, have been considered. A first request for consideration was filed with

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the above-identified application on November 17, 2000.

The MPEP states as follows:

"The examiner will consider the documents cited in the international search report in a PCT national stage application when the Form PCT/DO/EO/903 indicates that both the international search report and the copies of the documents are present in the national stage file. In such a case, the examiner should consider the documents from the international search report and indicate by a statement in the first Office action that the information has been considered. "

MPEP §609

Accordingly, Applicants respectfully request the Office to acknowledge consideration of the above references. A copy of the International Search Report is attached herewith for the Examiner's convenience. In addition, Applicants have listed the references on a Form PTO-1449. No fee is believed to be required, as the International Search Report was properly submitted with the application.

Applicants submit that the present application is now in condition for allowance and early notice of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Attorney of Record

Registration No.: 24,618

Kirsten A. Grueneberg, Ph.D.

Registration No.: 47,297

FAX NO.: (703) 413-2220 NFO:KAG:lcd

I:\user\KGRUN\198928.am.wpd

PHONE NO.: (703) 413-3000

22850

DOCKET NO.: 198928USOPCT

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Amendment Filed on: **HEREWITH**

IN THE CLAIMS

--22. (Amended) An electrochemical device_comprising;

at least one carrier substrate provided with a stack of functional layers comprising at least one electrically conducting layer [A based on] comprising metal oxide(s), and

at least one electrochemically active layer [F,];

wherein said <u>electrically conducting</u> layer [A] is part of a multicomponent electrode [E] combining with [the] <u>said electrically conducting</u> layer [A] <u>a)</u> at least one higher-conductivity material [B and/]or <u>b)</u> at least one network [C] of conducting wires or of conducting strips <u>or c)</u> a <u>combination of a)</u> and <u>b)</u>.

- 23. (Amended) The device of Claim 22, which is an electrically controllable system having variable optical properties [and/]or variable energy properties or both.
- 24. (Amended) The device of Claim 22, wherein [the] said higher-conductivity material [B is in the form of] comprises at least one layer combined with [the] said electrically conducting layer [A] and in electrical contact therewith.
- 25. (Amended) The device of Claim 22, wherein [the] said higher-conductivity material [B] is incorporated in [the] said electrically conducting layer [A].
 - 26. (Amended) The device of Claim 25, wherein [the the] said higher-conductivity

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material [B] is incorporated in [the] said electrically conducting layer [A], in the form of fibers or particles.

- 27. (Amended) The device of Claim 22, wherein [the] said at least one electrically conducting layer [layers A are] comprises [based on] at least one doped metal [oxides] oxide selected from the group consisting of doped tin oxide, doped zinc oxide and doped indium oxide.
- 29. (Amended) The device of Claim 27, wherein the doped zinc oxide is aluminum doped, [tine] tin doped or fluorine doped.
- 31. (Amended) The device of Claim 22, wherein [the] said higher-conductivity material [B] is essentially [metalic] metallic.
- 32. (Amended) The device of Claim 31, wherein [the] said higher-conductivity material [B is based on metals] comprises a metal selected from the group consisting of Ag, Au, Cu, Al, and alloys of thereof.
- 33. (Amended) The device of Claim 22, wherein said multicomponent electrode [E] is essentially transparent in the visible region.
- 34. (Amended) The device of Claim 22, wherein said network [C includes] comprises a plurality of conducting strips obtained by screen printing using a paste-like suspension of a silver-type metal and a low-melting-point frit in an organic binder.
- 36. (Amended) The device of Claim 22 obtained by a process comprising:[,]

 [wherein the] screen-printing said network [C is screen-printed] onto [the] a glasstype carrier substrate[,]to obtain a screen-printed network;

[then covered] covering said screen-printed network with said at least one electrically conducting layer [A] in order to form [an] said multicomponent electrode [E,]; or

laying [is laid] down said network on [the] said electrically conducting layer [A]

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covering [the] said carrier substrate.

- 37. (Amended) The device of Claim 22, wherein [the] <u>said</u> network [C includes] <u>comprises</u> a plurality of conducting wires in the form of essentially metallic wires surface-laid on a sheet [based on] <u>comprising a thermoplastic polymer</u>.
- 38. (Amended) The device of Claim 22, wherein [the] <u>said</u> network [C is based on] <u>comprises</u> a fabric, a net or a metallic nonwoven material.
- 39. (Amended) The device of Claim 38, wherein [the] said network [C is] comprises metallic wires having a diameter of from 10 to 100 μ m.
- 40. (Amended) The device of Claim 38, wherein [the] said network [C] is a network surface-laid on a sheet [based on] comprising a thermoplastic polymer.
- 41. (Amended) The device of Claim 22, wherein [the] said network [C] is obtained by etching or perforating a metallic layer or a metallic sheet.
- 42. (Amended) The device of Claim 22, wherein [the] said multicomponent electrode [E] comprises said at least one electrically conducting layer [A] and at least one layer [B] comprising said higher-conductivity material in electrical contact[,];

wherein at least one of [these layers] said at least one electrically conducting layer and said at least one layer comprising said higher-conductivity material are optionally [being] in contact with at least one layer [D of] comprising a dielectric material[, and all of the layers A, B and D preferably forming a stack of layers with interference interaction].

43. (Amended) The device of Claim 22, wherein [the layers D have] said at least one layer comprising a dielectric material has an optical function, a function of anchoring [the other layers B] said at least one layer comprising said higher-conductivity material to [the] said carrier substrate or a function as a barrier to [the] a migration of alkaline species coming from [the] said carrier substrate which is glass.

- 44. (Amended) The device of Claim 43, wherein [the layers D are] said at least one layer comprising a dielectric material [in the form] comprises a member selected from the group consisting of metal oxide, silicon oxide, metal oxycarbide, silicon oxycarbide, metal oxynitride, silicon oxycarbide and silicon nitride.
- 45. (Amended) The device of Claim 22, wherein [the] said multicomponent [electrodes E] electrode [comprise] comprises a [the] sequence ITO/Ag/ITO or Ag/ITO with optional interposition of at least one thin [layers] layer of partially oxidized metal at [the] an Ag/ITO interface.
- 46. (Amended) The device of Claim 22, wherein [the] said multicomponent [electrodes E] electrode [are] is provided with current leads.
- 47. (Amended) The device of Claim 46, wherein [the] said current leads are in the form of metal braids or shims.
- 48. (Amended) The device of Claim 22, which is an electrochromic system, with at least one carrier substrate and a stack of functional layers comprising at least, in succession,
 - a first electrically conducting layer,
 - an electrochemically active layer liable to reversible insertion of ions of anodic-coloring or, respectively, cathodic-coloring electrochromic material type,
 - a layer of electrolyte,
 - a second electrochemically active layer liable to reversible insertion of ions of anodic-coloring or, respectively, anodic-coloring electrochromic material type, and
 - a second electrically conducting layer,

[with] wherein at least one of [the two] said first and said second electrically

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conducting [layers] <u>layer comprises</u> [in the form of a] <u>said electrically conducting</u> layer [A based on] <u>comprising</u> metal oxide(s); and

wherein at least one of said first and said second electrically conducting layer [being]
is part of [a] said multicomponent electrode [E].

- 50. (Amended) The device of Claim 48, wherein said ions are H⁺, Li⁺ or OH [, of cathodic-coloring].
- 51. (Amended) The device of Claim 22, which is a viologenic system [with] comprising at least one carrier substrate and a stack of functional layers comprising at least, in succession,
 - a first electrically conducting layer,
 - a film having viologenic properties in the form of a polymer, of a gel or of a suspension in a liquid medium, and
 - a second electrically conducting layer[,];

wherein [with] at least one of [the two] said first and said second electrically conducting [layers] layer comprises [being of type A] said electrically conducting layer [A based on] comprising metal oxide(s); and

wherein at least one of said first and said second electrically conducting layer [being]
is part of [a] said multicomponent electrode [E].

- 54. (Amended) The device of Claim 52, wherein[,] the layers are transparent or absorbent.
 - 55. (Amended) A glazing, comprising:

the device of Claim 22[,];

wherein said device [using] <u>uses</u> as carrier substrate <u>a</u>) at least one [of the] rigid constituent [substrates] <u>substrate</u> of [the] <u>a</u> glazing [and/]or <u>b</u>) at least one flexible substrate

combined by lamination with one [of the] rigid constituent [substrates] substrate of said glazing or c) a combination of a) and b).

- 56. (Amended) A method of making a glazing comprising: laminating the device of Claim 22 with at least one rigid constituent substrate. 57, (Amended) A electrochemical energy storage device, comprising: the device of Claim 22.
- 58. (Amended) The electrochemical energy storage device of Claim 57 which is a battery or a fuel cell .--